

ADDITIONAL NOTES ON THE GENUS CHASCANUM. IX

Harold N. Moldenke

The last previous installment of notes on this genus was published in *Phytologia* 40: 479—486 (1978). For an explanation of the herbarium acronyms employed in this and all others in my series of notes on the genera of this and certain other families, see *Phytologia Memoirs* 2: 463—469 (1980) and *Phytologia* 50: 268 (1980).

CHASCANUM E. Mey.

Additional synonymy: Denisia Neck. apud Post & Kuntze, *Lexicon* 688. 1904. Chascharnum E. Mey. ex Gledhill, *East. Cape Veld Fls.* 201. 1969.

Additional & emended bibliography: *Poir. in Lam., Encycl. Méth. Bot.* 5: 286. 1804; *Endl., Gen. Pl.* 1: 634. 1838; *Meissn., Pl. Vasc. Gen.* 2: 199. 1840; *Reichenb., Deutsch. Bot. [Repert. Herb. Nom.]* 108. 1841; *D. Dietr., Syn. Pl.* 3: 371 & 605. 1843; *Walp., Repert. Bot. Syst.* 4: 38—39. 1845; *Lindl., Veg. Kingd.* 664. 1846; *A. L. Juss. in Orbigny, Dict. Univ. Hist. Nat.* 13: 185. 1849; *Pfeiffer, Nom. Bot.* 2 (1): 132 & 759 (1874) and 2 (2): 1570. 1874; *Baill., Hist. Pl.* 11: 102. 1891; *Briq. in Engl. & Prantl, Nat. Pflanzenfam.*, ed. 1, 4 (3a): 154. 1895; *Post & Kuntze, Lexicon* 117 & 688. 1904; *Chiouv., Fl. Somala* [1]: 49 & 274. 1929; *Levyns, Guide Fl. Cape Penins.* 216. 1929; *A. Chev., Rev. Bot. Appl. Agric. Trop.* 15: 913. 1935; *Worsdell, Ind. Lond. Suppl.* 1: 132. 1941; *Erdtman, Svensk Bot. Tidsk.* 39: 281—284. 1945; *Kidd, Wild Fls. Cape Penins.* pl. [40], fig. 6. 1950; *Dalla Torre & Harms, Gen. Siphonog.*, imp. 2, 431. 1958; *Van Campo, Bull. I.F.A.N.* 20 (A-3): 753—760. 1958; *Anon., Kew Bull. Gen. Ind.* 47, 72, & 273. 1959; *Nair & Reiman, Bull. Bot. Gard. Lucknow* 76: 3. 1962; *Dalla Torre & Harms, Gen. Siphonog.*, imp. 3, 430. 1963; *Puri, Jain, Mukerjee, Sarup, & Kotwal, Rec. Bot. Surv. India* 19: 1107. 1964; *Gledhill, East. Cape Veld Fls.* 201. 1969; *Rouleau, Guide Ind. Kew.* 41. 1970; *Mukhopadhyay, Pollen Morph. Verb.* [thesis]. 1971; *Thanikaimoni, Inst. Franç. Pond. Trav. Sect. Scient. Tech.* 12 (2): 30 (1973) and 13: 39, 56, & 328. 1976; *Ozenda, Fl. Sahara*, ed. 2, 407. 1977; *Bhandari, Fl. Indian Des.* 308—309, fig. 116. 1978; *Gibson, Wild Fls. Natal* 92, pl. 92, fig. 7. 1978; *Mukherjee & Chanda, Trans. Bose Res. Inst.* 41: 47, 48, 54, & 57. 1978; *Mold., Phytologia* 40: 479—486, 506, 507, & 510 (1978) and 44: 112—116, 333, & 507. 1979; *Hocking, Excerpt. Bot. A.* 33: 90. 1979; *Rogerson, Becker, & Prince, Bull. Torrey Bot. Club* 106: 62. 1979; *Mold., Phytologia* 45: 40, 352, & 504. 1980; *Mold., Phytol. Mem.* 2: 4, 198—204, 216, 223, 224, 230, 232, 235, 236, 240, 242—244, 248, 253, 256, 259, 347, 379, 380, 396, 413, & 529—530. 1980; *W. T. W. Morgan, Econ. Bot.* 35: 124. 1981; *Mold., Phytologia* 47: 411, 456, & 504 (1981), 48: 451, 452, & 506 (1981), and 50: 251, 260, 505, & 506. 1982.

CHASCANUM ADENOSTACHYUM (Schau.) Mold.

Additional & emended bibliography: Mold., Revist. Sudam. Bot. 6: 16 & 23. 1939; Mold., Phytologia 40: 480. 1978; Hocking, Excerpt. Bot. A. 33: 90. 1979; Mold., Phytol. Mem. 2: 236, 243, 244, & 529. 1980.

CHASCANUM ANGOLENSE Mold.

Additional bibliography: Mold., Phytologia 40: 480. 1978; Mold., Phytol. Mem. 2: 232 & 530. 1980; Mold., Phytologia 50: 251. 1982.

Goldsmith refers to this plant as a "low straggler in grassland and probably a garden escape, with minute white flowers in long narrow spikes" and his collection was misidentified and distributed as Stachytarpheta indica Vahl.

Additional citations: ZIMBABWE: Goldsmith 2/77 (Mu).

CHASCANUM ARABICUM Mold.

Additional bibliography: Mold., Phytologia 40: 480 (1978) and 44: 116. 1979; Mold., Phytol. Mem. 2: 202, 253, & 530. 1980.

CHASCANUM CAESPITOSUM (H. H. W. Pearson) Mold.

Additional bibliography: Mold., Phytologia 40: 480. 1978; Mold., Phytol. Mem. 2: 244 & 530. 1980.

CHASCANUM CERNUUM (L.) E. Mey.

Additional & emended bibliography: D. Dietr., Syn. Pl. 3: 605. 1843; Walp., Repert. Bot. Syst. 4: 38. 1845; Levyns, Guide Fl. Cape Penins. 216. 1929; Mold., Revist. Sudam. Bot. 6: 17 & 24. 1939; Worsdell, Ind. Lond. Suppl. 1: 132. 1941; Kidd, Wild Fls. Cape Penins. pl. [40], fig. 6. 1950; Mold., Phytologia 40: 480. 1978; Mukherjee & Chanda, Trans. Bose Res. Inst. 41: 47. 1978; Mold., Phytol. Mem. 2: 244, 379, & 530. 1980.

Additional illustrations: Levyns, Guide Fl. Cape Penins. 216. 1929; Kidd, Wild Fls. Cape Penins. pl. [40], fig. 6 (in color). 1950.

Recent collectors have found this plant growing in association with Struthiola garciana. Kidd (1950) describes it as "A straggling shrublet up to 1 ft. [tall]: occasional on flats from Fish Hoek to the south", flowering there from July to September.

Additional citations: SOUTH AFRICA: Cape Province: Dahlgren & Peterson F.120 (Go).

CHASCANUM DEHISCENS (L. f.) Mold.

Additional & emended bibliography: Poir. in Lam., Encycl. Méth. Bot. 5: 286. 1804; D. Dietr., Syn. Pl. 3: 605. 1843; Walp., Repert. Bot. Syst. 4: 38. 1845; Briq. in Engl. & Prantl, Nat. Pflanzenfam., ed. 1, 4 (3a): 154. 1895; Mold., Revist. Sudam. Bot. 6: 17, 23, & 24. 1939; Gledhill, East. Cape Veld Fls. 201, pl. 53, fig. 1. 1969; Mold., Phytologia 40: 481 & 482. 1978; Mukherjee & Chanda, Trans. Bose Res. Inst. 41: 47. 1978; Mold., Phytol. Mem. 2: 244, 347, 379, 380, 396, & 530. 1980.

Additional illustrations: Gledhill, East. Cap. Veld Fls. pl.

53, fig. 1. 1969.

Gledhill (1969) describes this plant as a shrub, about 30 cm. tall, the leaves olive-green, and the corollas white, their tube about 2 cm. long. He gives its distribution as "Occasional in dry mixed grassveld from Humansdorp to Peddie and inland to Graaff-Reinet and Queenstown" in South Africa, where, he avers, it blooms from September to April.

Linnaeus (1781) described this plant as "Phryma calicibus tandem longitudinaliter dehiscentibus". Poiret (1804) calls it "phryma à grappes" and notes "Si l'on considère dans cette plante la forme de la corolle, le caractère des semences, on concevra facilement qu'ils offroient des différences suffisantes pour séparer cette espèce des phryma. Linné fils le reconnaît lui-même, & il avoue qu'il l'eût fait s'il n'en eût empêché par la crainte de trop multiplier les genres."

Additional citations: SOUTH AFRICA: Cape Province: Bayliss BS.5053 (Ba); Dahlstrand 222 (Go).

CHASCANUM GARIPENSE E. Mey.

Additional & emended bibliography: D. Dietr., Syn. Pl. 3: 605. 1843; Walp., Repert. Bot. Syst. 4: 38. 1845; Mold., Revist. Sudam. Bot. 6: 17—18 & 23. 1939; Mold., Phytologia 40: 481—482 (1978) and 45: 352. 1980; Mold., Phytol. Mem. 2: 242, 244, 379, & 530. 1980.

Emended citations: SOUTH AFRICA: Cape Province: Drège s.n. [Afr. austr.; Herb. E. Meyer 3103] (E—118614—isotype); Henrici 2230 (W—1529030); F. R. R. Schlechter 11410 (W—553492); M. Schlechter s.n. [Stickhand, 17.V.1898] (E—118694).

CHASCANUM GILLETTII Mold.

Additional & emended bibliography: Mold., Revist. Sudam. Bot. 6: 18—19 & 23. 1939; H. N. & A. L. Mold., Pl. Life 2: 61. 1948; Mold., Phytologia 40: 482. 1978; Mold., Phytol. Mem. 2: 202, 204, 230, & 530. 1980.

CHASCANUM GÜRKEANUM (Loes.) Mold.

Additional bibliography: Mold., Phytologia 40: 482. 1978; Mold., Phytol. Mem. 2: 242 & 530. 1980.

CHASCANUM HANNINGTONII (Oliv.) Mold.

Additional bibliography: H. N. & A. L. Mold., Pl. Life 2: 62. 1948; Mold., Phytologia 40: 482. 1978; Mold., Phytol. Mem. 2: 224 & 530. 1980.

CHASCANUM HEDERACEUM (Sond.) Mold.

Additional & emended bibliography: Mold., Revist. Sudam. Bot. 6: 19, 23, & 24. 1939; Mold., Phytologia 40: 481 & 482. 1978; Mukherjee & Chanda, Trans. Bose Res. Inst. 41: 47. 1978; Mold., Phytol. Mem. 2: 235, 236, , 240, 242—244, 396, & 530. 1980.

Recent collectors have found this plant growing in lightly wooded areas with granite bottom in association with Protea caffra

and on severely grazed land on dolomite bottom with no wind protection, at 1800 m. altitude, in both flower and fruit in December and February. The corollas are said to have been "white" on Clarke 421.

Additional citations: SOUTH AFRICA: Transvaal: B. Clarke 421 Dahlstrand 849 (Go), 1053 (Go), 1092 (Go).

CHASCANUM HEDERACEUM var. *NATALENSE* (H. H. W. Pearson) Mold.

Additional bibliography: Good & Exell, Journ. Bot. 68: Suppl. 140. 1930; Mold., Phytologia 40: 482. 1978; Mold., Phytol. Mem. 2: 235, 240, 243, 244, 396, & 530. 1980.

CHASCANUM HILDEBRANDTII (Vatke) Gillett

Additional bibliography: Anon., Kew Bull. Gen. Index 72. 1959; Mold., Phytologia 40: 482-483 (1978) and 41: 116. 1979; Mold., Phytol. Mem. 2: 204, 223, 224, 230, & 530. 1980.

Linsen & Giesen encountered this plant in sandy soil in the wetter parts of lithosolic slopes of granite-porphyrries and gneisses, describing it as an erect herb, 35-40 cm. tall, the roots brownish-gray, scaly, the stems brown or light-brown and also scaly, the younger stems green with some red longitudinal lines especially near the origin of the petioles, the petioles reddish-brown, the mid-vein of each leaf with a touch of red and the leaf-margins sometimes reddish-brown, the corolla-tube creamy-white, the petals white, the anthers bright yellow, the receptacle small and green, and the filaments, style, stigma, and ovary pale-green to white. They found the plant growing at 1650 m. altitude, in flower in December.

Additional citations: KENYA: Linsen & Giesen 13 (W--2909743).

CHASCANUM HUMBERTI Mold.

Additional bibliography: Mold., Phytologia 40: 483. 1978; Mold., Phytol. Mem. 2: 248 & 530. 1980.

CHASCANUM INCISUM (H. H. W. Pearson) Mold.

Additional & emended bibliography: Mold., Revist. Sudam. Bot. 6: 19-20 & 24. 1939; Metcalfe & Chalk, Anat. Dicot. 2: 1031-1032. 1950; Mold., Phytologia 40: 483 & 485. 1978; Muhkerjee & Chanda, Trans. Bose Res. Inst. 41: 48. 1978; Mold., Phytol. Mem. 2: 242, 244, 379, & 530. 1980.

CHASCANUM INCISUM var. *CANESCENS* Mold.

Additional bibliography: Mold., Phytologia 40: 483 & 485. 1978; Mold., Phytol. Mem. 2: 242 & 530. 1980.

CHASCANUM INSULARE Mold.

Additional bibliography: Mold., Phytologia 40: 483-484. 1978; Mold., Phytol. Mem. 2: 248 & 530. 1980.

CHASCANUM INSULARE var. *CANESCENS* Mold.

Additional bibliography: Mold., Phytologia 40: 484. 1978; Mold.,

Phytol. Mem. 2: 248 & 530. 1980.

CHASCANUM INSULARE var. **HUMBERTI** Mold.

Additional bibliography: Mold., Phytologia 40: 484. 1978; Mold., Phytol. Mem. 2: 248 & 350. 1980.

CHASCANUM INSULARE var. **TRIANGULARE** Mold.

Additional bibliography: Mold., Phytologia 31: 123. 1975; Mold., Phytol. Mem. 2: 248 & 530. 1980.

CHASCANUM INTEGRIFOLIUM (H. H. W. Pearson) Mold.

Additional bibliography: Mold., Phytologia 31: 123. 1975; Mold., Phytol. Mem. 2: 244 & 530. 1980.

CHASCANUM KROOKII (Gürke) Mold.

Additional & emended bibliography: Mold., Revist. Sudam. Bot. 6: 20 & 24. 1939; Mold., Phytologia 40: 484. 1978; Mold., Phytol. Mem. 2: 244 & 530. 1980.

CHASCANUM LATIFOLIUM (Harv.) Mold.

Additional & emended bibliography: Mold., Revist. Sudam. Bot. 6: 20 & 24. 1939; Mold., Phytologia 40: 484. 1978; Mold., Phytol. Mem. 2: 243, 244, & 530. 1980.

CHASCANUM LATIFOLIUM var. **GLABRESCENS** (H. H. W. Pearson) Mold.

Additional & emended bibliography: Mold., Revist. Sudam. Bot. 6: 20 & 24. 1939; Mold., Phytologia 31: 124. 1975; Mold., Phytol. Mem. 2: 243, 244, & 530. 1980.

CHASTANUM LATIFOLIUM var. **TRANSVAALENSE** Mold.

Additional & emended bibliography: Mold., Revist. Sudam. Bot. 6: 20 & 24. 1939; Mold., Phytologia 40: 484. 1978; Mold., Phytol. Mem. 2: 244 & 530. 1980.

CHASCANUM LIGNOSUM (Dinter) Mold.

Additional bibliography: Mold., Phytologia 40: 484. 1978; Mold., Phytol. Mem. 2: 242, 244, & 530. 1980.

CHASCANUM MARRUBIIFOLIUM Fenzl

Emended synonymy: Bouchea marrubifolia Schau. apud Wight, Icon. Pl. Ind. Orient. 4: pl. 1461. 1849.

Additional & emended bibliography: D. Distr., Syn. Pl. 3: 605. 1843; Walp., Repert. Bot. Syst. 4: 38—39. 1845; Wight, Icon. Pl. Ind. Orient. 4 (3): 10, pl. 1461. 1849; Briq. in Engl. & Prantl, Nat. Pflanzenfam., ed. 1, 4 (3a): 154. 1895; Chiov., Fl. Somalia [1]: 56 & 274. 1929; Xavier Louis & Monod, Bull. Agenc. Gén. Colon. 27: 605 & 626. 1934; A. Chev., Rev. Bot. Appl. Agric. Trop. 15: 913. 1935; Mold., Revist. Sudam. Bot. 6: 21, 23, & 24. 1939; Monod, Contrib. Etud. Sahara Occid. 2: 113, 114, & 170, pl. 21. 1940; Nair & Rehman, Bull. Nat. Bot. Gard. Lucknow 76: 10—11, pl. 2, fig. 7, & text-fig. 17. 1962; Thanikaimoni, Inst. Franç. Pond.

Trav. Sect. Scient. Tech. 13: 39. 1976; Ozenda, Fl. Sahara, ed. 2, 407. 1977; Bhandari, Fl. Indian Des. 308-309, fig. 116. 1978; Mukherjee & Chanda, Trans. Bose Res. Inst. 41: 48. 1978; Mold., Phytol. Mem. 2: 198-202, 204, 216, 230, 253, 256, 259, 347, 379, 413, & 530. 1980; Mold., Phytologia 40: 484 (1978), 44: 116 (1979), and 48: 151. 1981; W. T. W. Morgan, Econ. Bot. 35: 124. 1981.

Additional illustrations: Wight, Icon. Pl. Ind. Orient. 4: pl. 1461. 1849; Erdtman, Svensk Bot. Tidsk. 39: 282, fig. 3. 1945; Jafri, Fl. Karachi fig. 282. 1966; Bhandari, Fl. Indian Des. 309, fig. 116. 1978.

Bhandari (1978) refers to this species as "A rare plant found on the open, grassy hill tops or on gravel, but locally abundant" in Rajasthan. He lists the vernacular name, "bai", for it and cites his nos. 70, 413, 1019, & 1588 and Blatter 10375 & 10385 from Rajasthan. He gives the overall distribution of the plant as tropical Africa, Abyssinia, Egypt, Arabia, Sind (Pakistan), and Rajasthan (India) and avers that it flowers and fruits from September to December. Morgan (1981) lists it from Kenya, where he claims that it is of economic use and has the vernacular name, "ekajamait".

Puri and his associates (1964) also lists the species from Rajasthan, citing Blatter & Hall s.n., Jain 40026, Puri 23997, Ratnam s.n., and Sarup s.n., describing it as "A much branched woody herb; leaves suborbicular, strongly nerved; flowers sessile, in elongated spikes up to 20 cm. long, closely appressed to [the] rachis".

Additional citations: MOUNTED ILLUSTRATIONS: Monod, Contrib. Etud. Sahara Occid. 2: pl. 21. 1940 (N).

CHASCANUM NAMAQUANUM (H. Bolus) Mold.

Additional & emended bibliography: Mold., Revist. Sudam. Bot. 6: 21, 22, & 24. 1939; Mold., Phytologia 40: 485. 1978; Mold., Phytol. Mem. 2: 244 & 530. 1980.

CHASCANUM PINNATIFIDUM (L. f.) E. Mey.

Additional & emended bibliography: D. Dietr., Syn. Pl. 3: 605. 1843; Walp., Repert. Bot. Syst. 4: 39. 1845; Briq. in Engl. & Prantl, Nat. Pflanzenfam., ed. 1, 4 (3a): 154. 1895; Mold., Revist. Sudam. Bot. 6: 22 & 24. 1939; Mold., Phytologia 40: 483 & 485. 1978; Mukherjee & Chanda, Trans. Bose Res. Inst. 41: 48. 1978; Mold., Phytol. Mem. 2: 236, 242-244, & 530. 1980.

Seydel encountered this plant at 1600 m. altitude, fruiting in April. Clarke refers to it as infrequent on grassveld with scattered trees, the corollas being "yellow".

Additional citations: NAMIBIA: B. Clarke 2528 (Mu); Seydel 2361 (Go). SOUTH AFRICA: Cape Province: Drége 822a (E-118616), 822b (E-118616).

CHASCANUM PINNATIFIDUM var. RACEMOSUM Schinz & Mold.

Additional & emended bibliography: Mold., Revist. Sudam. Bot. 6: 22 & 24. 1939; Mold., Phytologia 31: 235. 1975; Mold., Phytol.

Mem. 2: 236, 242, 244, & 530. 1980.

CHASCANUM PUMILUM E. Mey.

Additional bibliography: D. Dietr., Syn. Pl. 3: 605. 1843; Walp., Repert. Bot. Syst. 4: 38. 1845; Briq. in Engl. & Prantl, Nat. Pflanzenfam., ed. 1, 4 (3a): 154. 1895; Good & Exell, Journ. Bot. 68: Suppl. 140. 1930; Mold., Phytologia 40: 485-486. 1978; Mukherjee & Chanda, Trans. Bose Res. Inst. 41: 48. 1978; Mold., Phytol. Mem. 2: 232, 242-244, & 530. 1980.

Emended citations: SOUTH AFRICA: Cape Province: Zeyher 1366 (W-1578088).

CHASCANUM PUMILUM var. PUBERULENTUM Mold.

Additional & emended bibliography: Mold., Revist. Sudam. Bot. 6: 22-24. 1939; Mold., Phytologia 31: 236. 1975; Mold., Phytol. Mem. 2: 244 & 530. 1980.

CHASCANUM RARIFLORUM (A. Terrac.) Mold.

Additional bibliography: Fedde & Schust., Justs Bot. Jahresber. 39 (2): 319. 1913; Mold., Phytologia 31: 236-237. 1975; Mold., Phytol. Mem. 2: 203 & 530. 1980.

CHASCANUM SCHLECHTERI (Gürke) Mold.

Additional bibliography: Gibson, Wild Fls. Natal 92, pl. 92, fig. 7. 1978; Mold., Phytologia 40: 486. 1978; Mold., Phytol. Mem. 2: 240, 243, 244, & 530. 1980.

Illustrations: Gibson, Wild Fls. Natal pl. 92, fig. 7 (in color). 1978.

Gibson (1978) describes this plant as a small perennial herb, to 16 cm. tall, flowering in November, with creamy-white corollas.

CHASCANUM SCHLECHTERI var. TORREI Mold.

Additional bibliography: Mold., Phytologia 31: 237. 1975; Mold., Phytol. Mem. 2: 240 & 530. 1980.

CHASCANUM SESSILIFOLIUM (Vatke) Mold.

Additional bibliography: Chiov., Fl. Somalia [1]: 49. 1929; Mold., Phytologia 40: 486. 1978; Hocking, Excerpt. Bot. A.33: 90. 1979; Mold., Phytol. Mem. 2: 204, 379, & 530. 1980.

Kazmi and his associates found this plant in flower and fruit in December and describe the corollas as "yellow, rose-lipped".

Additional citations: SOMALIA: Kazmi, Elmi, Mahamoud, & Suliman 237 (Mu).